signal strength measurements, calculated signal strength and the provision of a video tape which showed conclusively that the Monticello station could be heard, and then rebroadcast, adequately by the Fort Lee translator. (PF 148-150; 154; 157; 161; 163-164; 234-235) Their testing is probative of the issue as it might have existed early in the operation of the Monticello station because they provided ample proof that the relevant conditions in 1997 were substantially the same as in 1994 and 1995, without material rebuttal from the Bureau or Universal. (PF 152; 157-160)

- 408. Mr. Turro provided audio tapes as Exhibit T30 demonstrating the good quality of the Fort Lee translator's broadcasts retransmitting both the Pomona translator and the Monticello station from November 1997. (PF 111) Audio tapes demonstrating the good quality of the Fort Lee translator's broadcasts retransmitting both the Pomona translator and the Monticello station from July 1995 were provided to the Commission as part of the July 27, 1995 response to Mr. Goldstein's letter of inquiry. (PF 145) The accuracy of all of those audio tapes was unchallenged in the record.
- 409. In addition, Mr. Luna, a former employee of Jukebox Radio and a current employee of Universal who was a witness hostile to Mr. Turro, testified that during the period of time from late October 1994, to approximately early June of 1995, when he was employed at Jukebox Radio, he generally understood that the Fort Lee translator could receive the signal of the Monticello station and retransmit it. (PF 289)
- 410. This record of actual experience, much of it from credible witnesses independent of Mr. Turro, including the Commission's own field engineer, confirm's Mr. Turro's testimony that

the Monticello station consistently places a signal over the Fort Lee translator sufficient for it to receive the Monticello station off the air, or "directly through space," and retransmit it.

- 3) Signal strength testing, the "hot spot," filtering and signal strength predictions
- 411. There was no dispute that the Monticello station signal (99.7 MHz) may suffer from interference from first adjacent station WBAI (99.5 MHz). In this regard, Mr. Cohen produced a study that predicted that the Fort Lee translator could not receive a signal reliably from the Monticello station suitable for rebroadcast. (PF 205-207)
- 412. Universal's expert, Mr. La Follette, also testified that the Monticello station placed a signal over a building in Fort Lee approximately 0.6 km from the Mediterranean Towers, and based upon that testing, in his opinion, that signal was not suitable for rebroadcast. (PF 176) On cross-examination it became clear that his opinion was based entirely upon his opinion concerning interference from the first adjacent station, WBAI, not on the available signal strength of the Monticello station. (PF 186) In addition, the credibility Mr. La Follette's testimony is doubtful, for the reasons discussed below. (C 538-542)
- 413. As for the interference from WBAI, Mr. Turro and his consulting engineers demonstrated two relevant facts: that adequate filtering could eliminate that interference from any location on the roof of the Mediterranean Towers, and that the so-called "hot spot" on the roof of the Mediterranean Towers provided an area of approximately three feet square where a particularly strong signal was available consistently, a signal strong enough to be received without the need for filtering devices. (PF 87; 154; 157-161; 163-164)

- 414. Mr. Hurst and Mr. Hidle testified to the existence of the hot spot, which they both personally observed in October 1997. (<u>Ibid.</u>) Mr. Hurst testified that he had observed the hot spot previously in July 1995, and that it was in the same place when he observed it again in 1997, (PF 157-159) establishing additional proof of its stability, above and beyond such testimony from Mr. Turro.
- 415. Mr. Hurst testified that the Monticello station signal at the hot spot was strong enough to be received and rebroadcast without the need for filtering of the interfering transmissions of WBAI. (PF 157; 161) He further testified that with filtering of the interference from WBAI, the Monticello station could be received adequately from any part of the roof and rebroadcast. (PF 161)
- 416. Mr. Hurst also testified that, while he was unable to explain the causes of the hot spot, he had observed other hot spots that were continuous over a long period of time in a two to three feet area. (PF 160)
- 417. Mr. Turro testified that filtering devices had been in use at the Fort Lee translator from the time it first started to retransmit the Monticello station. He testified that he had employed three different filtering devices. The first was a "Phase Canceller," which was in use from October of 1994 until the spring of 1995. Then he replaced it with a 40 dB notch filter, which was observed in operation by Mr. Hurst on July 6, 1995. Later in July 1995, Mr. Turro replaced that device with a linked pair of 30 dB notch filters, which he stated remains in place as of the date of his testimony and which Mr. Hurst and Mr. Hidle observed in operation in October 1997. Mr. Turro testified that there was no material change in the quality of the signals due to changes in the filtering devices. This testimony was confirmed by Mr. Hurst. Mr. Turro testified

that initially he replaced the Phase Canceller because it required occasional adjustments, which the 40 dB notch filter did not. (PF 88-93; 108-109)

- 418. The Phase Canceller is of particular significance because Mr. Turro has testified that it was in use initially during the period of time when the Fort Lee translator started to retransmit the signal of the Monticello station. (PF 88-92)
- 419. The Phase Canceller which was employed by Mr. Turro was exhibited and examined at the hearing. (PF 88-89) As testified to by Mr. Turro and Mr. Hurst, and as is clearly imprinted the Phase Canceller itself, the Phase Canceller showed a date of October 1994 in which it was manufactured, sold or shipped. (PF 89) This corroborates Mr. Turro's testimony that this device was purchased by him and put into place at the Fort Lee translator in October 1994.
- 420. Mr. Hidle testified that he tested the Phase Canceller in his firm's laboratory and determined that it would reject as much as 45 dB of interference from WBAI. (PF 234) In addition, Mr. Hidle's testing established that the Sony receiver, used at the Fort Lee translator, could itself reject at least 33 dB of interference from WBAI, and that the antenna in use could discriminate between the signals of the two stations for an additional 20 dB, or a total of 98 dB of discrimination between the signals of the Monticello station and WBAI. (PF 190; 234)
- 421. Mr. La Follette testified that, based upon his signal strength measurements on February 2, 1995 from a location 0.6 km from the Fort Lee translator, WBAI's signal strength exceeded the Monticello station signal by 38 dB. (PF 177; 187) As was testified to by Mr. Hidle, the 78 dB combination of the Sony receiver (33 dB) and the Phase Canceller (45 dB) was

more than sufficient to overcome the interfering signal from WBAI actually measured by Mr. La Follette. (PF 234; see also 190-191)

422. Mr. La Follette also testified that CDE spectrum analyzer tests showed that the signal of WBAI partially encroached into the frequency band of the Monticello station and he contended that such interference therefore could not be filtered out. (PF 177) There is no evidence that he or his firm ever made any effort to determine in practice whether the WBAI signal could be filtered out. Mr. La Follette's testimony on this subject must be rejected for three reasons. First, the Phase Canceller was designed to "cancel" undesired co-channel signals, *i.e.* signals entirely within the same frequency band (PF 192), a matter confirmed by Mr. Cohen and the manufacturer's description of the Phase Canceller. (PF 193; 226) Therefore, it could successfully cancel a signal which only partially encroached into the desired frequency band. Second, Mr. Hidle demonstrated that if the same spectrum analyzer test were run at a higher resolution, the "encroachment" disappeared, rendering the factual premise for Mr. La Follette's contention erroneous. (PF 195) Third, observations made at the Fort Lee translator site established that reception of the Monticello station was possible even from locations on the roof outside of the hot spot. (PF 161)

423. Mr. Cohen's study was theoretical and largely statistical. (PF 212-13) Mr. Cohen's study produced a prediction of field strength of the Monticello station's signal at the Fort Lee translator of 25.9 dBμ for 50 percent of the locations 50 percent of the time with no more than a 50 percent confidence factor. (PF 219) This coincided with Mr. Hidle's actual measurement of 26 dBμ at the Fort Lee site but outside of the hot spot and Mr. Hidle's unchallenged prediction

that 21 dB $\mu$  was the Monticello station signal strength necessary for reception at the Fort Lee translator. (PF 235)

424. Mr. Cohen's opinion that signal strength would not be sufficient to permit the Fort Lee translator to transmit a broadcast quality signal reliably was based on several assumptions. One was that the proper field strength to assume for the purpose of his study was 5.5 dBu. This value was reduced from 25.9 dBµ to 5.5 dBµ in order to increase the statistical probability of signal reception to 90 percent. (PF 216-219) A second assumption was that in the presence of the strong undesired signal from WBAI, 5.5 dBµ was insufficient to permit interference-free reception of the Monticello station by the Fort Lee translator. Mr. Cohen expressed the view that the WBAI signal would be 86.3 dB stronger than the Monticello station signal at 5.5 dBµ, and that no combination of antenna discrimination and filtering would eliminate the WBAI problem. (PF 207-208) Mr. Cohen's opinion was refuted by Mr. Hidle's undisputed testimony as to the results of his actual measurement programs. As indicated above, Mr. Hidle found based on his measurements that the system employed by Mr. Turro at Fort Lee contained substantially more than 86.3 dB of discrimination between the WBAI signal and the Monticello station's signal. (C 420) Mr. Hidle also actually measured the signal strength of the Monticello station at the Fort Lee translator to be 26 dB $\mu$ , providing further evidence that the assumptions behind Mr. Cohen "prediction" of a signal strength of 5.5 dBµ were invalid. Mr. Cohen's predication was at odds with the measurement taken by the other expert retained by the Bureau and Universal: Mr. La Follette testified that the WBAI signal was 38 dB stronger than the Monticello station signal, which is less than half of Mr. Cohen's prediction that WBAI would be 86.3 dB stronger than the Monticello station. Finally, Mr. Cohen took no account of the existence of the hot spot. He

expressed the view that hot spots are very improbable and that extensive observations would be necessary to establish their existence. (PF 210-211)

425. The only possible conclusion is that at all times beginning with the commencement of operation of the Monticello station in October 1994, the Fort Lee translator has been capable of receiving an acceptable signal of the Monticello station directly off the air. Mr. Turro's entirely credible testimony on this subject has been corroborated by the observations of his consulting engineers, Mr. Hidle and Mr. Hurst, and by those of the Commission's inspector, Mr. Loginow. The opinions expressed to the contrary by the consulting engineers retained by Universal must be rejected. In essence, they can be reduced down to two points. The first is the opinion that Mr. Turro would not be able to filter out the signals of WBAI so as to provide interference-free service. The evidence that the WBAI signals actually can be, were, and are, filtered out successfully, is, however, undisputed and conclusive.

426. The second point is Mr. Cohen's opinion that a signal strength of 5.5 dBμ should be used as the basis for study, a signal he considered insufficient to permit broadcast quality service. The actual experience of Mr. Turro, corroborated by the observations and measurements of Messrs. Hurst, Hidle and Loginow, and the admission by Mr. La Follette that the Monticello station's signal strength was not, itself, insufficient, establish that the Monticello station's signal strength has in fact consistently been sufficient over the period of time in question. In this connection, it is also concluded that the hot spot, *i.e.* an area of consistently higher than predicted Monticello station signal strength, has existed unchanged on the roof of the Mediterranean Towers since at least October 1994. Mr. Turro's daily observations between October 1994 and January 1995 corroborated by the testimony of Messrs. Hurst, Hidle and Loginow are sufficient

to establish its existence. The undisputed testimony is that the Monticello station's signal strength in the hot spot was such that reception of the Monticello station's signal was free of interference from WBAI by using the Sony receiver in the absence of any additional filtering devices. The overwhelming evidence of actual experience necessarily outweighs Mr. Cohen's theoretical study.

#### 4) Receipt of the Pomona translator at the Fort Lee translator

- 427. Mr. Turro testified that after the Pomona translator started to retransmit the Monticello station in January 1995, he regularly used that signal for retransmission at the Fort Lee translator. (PF 95)
- 428. Mr. Hurst and Mr. Hidle both testified that the Pomona translator places a strong signal over the Fort Lee translator. (PF 143; 149; 163)
- 429. Mr. Cohen did not study the Pomona translator-to-Fort Lee translator radio path (PF 215) but Mr. La Follette generally confirmed that this signal path would be strong. (PF 197)
- 430. Mr. Loginow also observed that the Fort Lee translator receives a high quality signal from the Pomona translator. (PF 126)
- 431. Similarly, Mr. Hurst and Mr. Hidle testified to the good strength of the Monticello station at the Pomona translator. (PF 143-144; 163)
- 432. Mr. Cohen did not study the Monticello station-to-Pomona translator transmission path. (PF 214)
- 433. Mr. La Follette generally confirmed that the Monticello station would place a strong signal over the Pomona translator. (PF 199)

434. The record compels the conclusion that since the inception of retransmission of the Monticello station by the Pomona translator in January 1995, the Fort Lee translator has received an acceptable over the air, or "directly through space," signal from the Pomona translator, which in turn has received an acceptable over the air, or "directly through space," signal from the Monticello station.

# 5) The Fort Lee translator retransmitted off the air programming a) Operation of WMG-499

- 435. It is undisputed that Mr. Turro applied for authority to construct and operate WMG-499 expressly so that 30 second per hour promotional announcements and operational communications could be carried from the Dumont studio and the Fort Lee translator. The Commission granted the license to WMG-499 to Mr. Turro based upon those representations, and the license shows the address of the Dumont studio as the location of the WMG-499 transmitter and the Fort Lee translator as the receive point. (PF 238-239)
- 436. Section 74.1231(g) of the Commission's Rules specifically states that commercial FM translators may originate programming for 30 seconds per hour of promotional announcements and for emergency messages. (PF 103) Section 74.531(f) of the Commission's Rules provides that an intercity relay may be multiplexed to provide additional channels of communication for, among other things, operational communications. (PF 100)
- 437. It is undisputed that Intercity Microwave Relay Station WMG-499 was in operation between the Dumont studio and the Fort Lee translator from the time that the Monticello station went on the air in late October 1994, to the time that WMG-499 was deactivated permanently early in July 1995. (PF 240)

- 438. Mr. Turro testified that for that entire period of time, WMG-499 was operational continuously because it could be damaged by being turned on and off repeatedly and that he carried the Jukebox Radio audio on a channel of the microwave transmission path so that it could be readily identified in a market suffering from severe frequency congestion. Mr. Turro testified that WMG-499 was used to carry telemetry for remote control along a data channel from the Dumont studio to the Fort Lee translator and that the audio channel was available to supply emergency messages, if necessary, but that WMG-499 was never otherwise used to provide programming to the Fort Lee translator. (PF 240) Mr. Turro's testimony about the purposes and uses of WMG-499 was confirmed contemporaneously in a June 1995 letter to the Commission from Mr. Turro's consulting engineers. (PF 240) Mr. Turro was unable to remember clearly, and he maintained no records, but he testified that WMG-499 may have been used as many as five times to provide emergency messages to the Fort Lee translator while the Monticello station was in operation, but it may have never been so used. WMG-499 was used rarely (i.e. no more than five times) because the usual practice was to place emergency messages on the program feed and, therefore, WMG-499 would have been used only under circumstances when an emergency occurred at the same time that the Dumont studio-to-Monticello station program feed was out of commission. (PF 240-243; 81)
  - 439. Mr. Turro testified, and Sergeant Paul Einreinhofer confirmed, that Jukebox Radio had a cooperative arrangement with the Bergen County Office of Emergency Management to be the County's broadcast outlet for emergency messages. This testimony was uncontested. (PF 80) This arrangement between Jukebox Radio and the Bergen County Office of Emergency

Management confirms the need for a mechanism to originate emergency messages from the Fort Lee translator, if necessary.

- 440. It is undisputed that Mr. Turro deactivated WMG-499 permanently in early July 1995, when so directed by the Commission. Mr. Loginow confirmed that WMG-499 was inactive on July 31, 1995. (PF 79)
- 441. Mr. Turro's testimony, as summarized above, is accepted. As noted above, he was a well informed and credible witness. It is therefore concluded that Mr. Turro never used WMG-499 to supply Jukebox Radio programming directly from the Dumont studio to the Fort Lee translator. To the extent that he used WMG-499 for remote control telemetry, or for emergency messages, such uses were consistent with the Commission's Rules. (PF 97-103)
- 442. Contrary testimony, to the effect that Mr. Turro used WMG-499 to program the Fort Lee translator directly, is without merit for the following reasons described below.
- 443. Mr. La Follette concluded that WMG-499 was used to provide programming directly to the Fort Lee translator solely because he heard the Jukebox Radio programming on the WMG-499 frequency of 951 MHz (PF 249) and assumed, therefore, that it was being supplied to the Fort Lee translator for rebroadcast. (PF 182) However, Mr. La Follette's observation does not contradict Mr. Turro's testimony that the programming on WMG-499 was not being supplied to the Fort Lee translator and is otherwise meaningless because it is consistent with Mr. Turro's testimony concerning the audio channel. Moreover, Mr. La Follette admitted that he could not be sure if the WMG-499 audio was actually retransmitted by the Fort Lee translator without inspecting the translator's operations, which he did not. (PF 249)

- 444. Both Mr. Luna (PF 288; 291) and Mr. Gaghan (PF 330) testified that while they were employed with Jukebox Radio, it was their understanding that WMG-499 was used to program the Fort Lee translator. As further demonstrated in the credibility conclusions below, Mr. Luna and Mr. Gaghan's testimony is entitled to no weight. (C 501-537) Neither of them was technically knowledgeable in general, and more specifically, neither of them ever visited the Fort Lee translator and so had no opportunity to observe its facilities. (PF 298; 329; 331) As was the case for Mr. La Follette, they had no personal knowledge of whether the WMG-499 audio was actually supplied to the Fort Lee translator's transmitters. (PF 298; 331)
- 445. The most significant piece of evidence that Mr. Turro's testimony about the use of WMG-499 misrepresents the facts comes from Mr. Loginow's testimony about the tests he performed at the Fort Lee translator on May 15, 1995. Mr. Loginow testified that on May 15, 1995, he went to the Mediterranean Towers building to perform tests with a signal generator. (PF 251)
- 446. The nature of Mr. Loginow's tests was straight forward. He transmitted a signal on each of the frequencies of the Pomona translator (94.3 MHz), the Monticello station (99.7 MHz) and WMG-499 (951 MHz) while listening to the output of the Fort Lee translator on the air (103.1 MHz). He intended to overwhelm or blanket the incoming signal feeding programming to the Fort Lee translator with the signal generator, and by hearing a reaction on the Fort Lee translator's output channel, determine the source of the translator's programming. (PF 252-253)
- 447. Mr. Loginow testified that he generated a signal on each of the above-noted frequencies and heard a reaction only when he transmitted on 951 MHz (PF 251-252), indicating

that the Fort Lee translator was receiving its programming feed directly from WMG-499, in clear violation of the Commission's Rules and contrary to Mr. Turro's representations.

448. Mr. Loginow's May 15, 1995 determination carries no weight for a number of reasons. Mr. Loginow testified that the transmissions of the signal generator were a "low level signal" (PF 252), which he subsequently stated was a maximum power output of less than half a watt. (PF 254) He agreed that the validity of his testing would be undermined by distance and obstructions between the signal generator and the antenna to be affected by it. (PF 258-260)

449. Mr. Loginow performed his May 15, 1995 tests at the roof level of the Mediterranean Towers, but inside of a cinder block room at the top of the stairs. (PF 255) He had intended to perform the tests out in the open on the roof, but did not do so because the door was locked. (PF 256) He testified that he would have preferred to have performed the testing out on the roof (PF 257) and that he had assumed that the antennas to be tested were out on the roof. (PF 261)

#### b) The May 15, 1995 testing concerning WMG-499

- 450. Mr. Turro testified that he had programmed the remote control equipment of the Fort Lee translator with two failsafes. (PF 245-247) One was that in the event that the telemetry channel on WMG-499 was interrupted, the Fort Lee translator would automatically home onto the audio channel on WMG-499 and retransmit it. (PF 76; 245)
- 451. Mr. Turro testified that he programmed that failsafe to provide him an alternate means to originate messages from the Fort Lee translator if an emergency occurred. He stated that if other remote controls failed, he could simply interrupt the flow of data from WMG-499 to

the Fort Lee translator and then be able to provide live emergency messages from the Dumont studio. (PF 246)

- 452. Mr. Turro also testified that if the entire communications path along WMG-499 was lost, then the Fort Lee translator was programmed with a second failsafe which would cause it to automatically retransmit the signal of either of the Pomona translator or the Monticello station. (PF 247)
- 453. Mr. Turro testified that in performing his signal generator test on May 15, 1995, Mr. Loginow had, in effect, interrupted or "jammed" the telemetry channel on WMG-499, invoking the failsafe and causing the Fort Lee translator to rebroadcast the audio signal of WMG-499. In other words, Mr. Loginow's testing had caused the results he observed. (PF 275)
- 454. While Mr. Loginow testified that he considered such a failsafe arrangement to be irrational, and in his opinion poor engineering, Mr. Loginow agreed that each part of the failsafe arrangement was technically possible (PF 282-284) and that his signal generator would have interrupted or blanketed the WMG-499 transmissions. (PF 276)
- 455. Two important pieces of evidence support Mr. Turro's explanation that Mr. Loginow's May 15, 1995 testing caused the reaction he observed. First, Mr. Turro testified that he was in the Dumont studio on May 15, 1995, listening to Jukebox Radio as it was coming off the air from the Fort Lee translator, and that he heard it "break up." He testified that he hurried to check the TC-8 remote control unit for the Fort Lee translator and found that status light No. 6 was lit, indicating that WMG-499 was being retransmitted, rather than finding status light No. 5 lit, indicating retransmission of the Pomona translator. Mr. Turro testified that he immediately switched the Fort Lee translator back to receipt of the Pomona translator, and subsequently,

called Mr. Hurst and told him about the incident thinking that representatives of Universal had caused the problem. (PF 277-278)

- 456. Mr. Hurst corroborated Mr. Turro's testimony by stating that Mr. Turro had called him on May 16, 1995 and recounted the story of the "jamming" incident. Mr. Hurst further testified that he had assured Mr. Turro that Universal had not caused the jamming but that it probably had been the FCC testing. (PF 279)
- 457. Second, Mr. Turro testified that he had raised the jamming incident with Mr. Loginow during his August 2, 1995 investigations, letting Mr. Loginow know that he was aware that he had been responsible for "jamming" the microwave path on May 15, 1995. (PF 280)
- 458. Mr. Loginow confirmed that Mr. Turro had raised the matter of the May 15, 1995 "jamming" incident with him during the August 2, 1995 investigations. Mr. Loginow testified that he had never communicated the fact of the May 15, 1995 testing to Mr. Turro or anyone else at Jukebox Radio, and that he had no knowledge of anyone with the Commission doing so. Mr. Loginow's only explanation of Mr. Turro knowing about the May 15, 1995 testing on August 2, 1995 was because Mr. Turro had observed its results and that he made a good guess that Mr. Loginow had been the person who performed the tests. (PF 280) Clearly, the only results which Mr. Turro could have observed were the failsafe causing the Fort Lee translator to initiate rebroadcast of the audio on WMG-499 in response to Mr. Loginow's signal generator.
- 459. Based upon the testimony of Mr. Turro concerning the failsafe programming of the Fort Lee translator, including the consistency of his technical explanations, the fact that Mr. Loginow testified that no part of the arrangement described by Mr. Turro was technically impossible, and that Mr. Turro's contemporaneous knowledge of the May 15, 1995 testing, or as

he called it "jamming," was corroborated separately by Mr. Loginow and by Mr. Hurst, the record supports the finding that the "determination" of Mr. Loginow on May 15, 1995, that WMG-499 was providing programming to the Fort Lee translator, was erroneous, a result caused by the signal generator testing itself.

460. Mr. Turro had no incentive to violate the Commission's Rules by using WMG-499 to program the Fort Lee translator. As noted in the previous conclusions ( C 403-434), at all times the Fort Lee translator had the capability of receiving its programming off the air in compliance with the Commission's Rules. Indeed, the Fort Lee translator has been retransmitting Jukebox Radio programming for well in excess of two years after WMG-499 was shut down, again proving that it was not needed to program the translator. Therefore, on May 15, 1995, there was no rational reason for Mr. Turro to program the Fort Lee translator using WMG-499 illegally, when the facts are clear that he could program the Fort Lee translator legally.

461. The results of the several other tests conducted by Mr. Loginow support the conclusion that something erroneous happened on May 15, 1995. Mr. Loginow, unannounced, performed tests of the Fort Lee translator on April 14, 1995, tests and inspections on August 2, 1995, and tests on June 4, 1997. Mr. Loginow testified that on each of those occasions the Fort Lee translator "passed the test," *i.e.* that during tests before and after the May 15, 1995 incident, Mr. Loginow determined that the Fort Lee translator was receiving its programming off the air. This includes a signal generator test on June 4, 1997. Accordingly, it is incredible that Mr. Turro would choose to violate the Commission's Rules on May 15, 1995, without reason, but was in compliance the three other times observed by Mr. Loginow before and after May 15, 1995.

### c) The May 15, 1995 testing concerning the Pomona translator

- 462. Mr. Turro testified that for a period of several months in 1995, including on May 15, 1995, he regularly used a receive antenna in the basement of the Mediterranean Towers to receive Jukebox Radio programming off the air from the Pomona translator for retransmission by the Fort Lee translator. He did so because the roof mounted antenna he had used previously had been vandalized and the location in the basement was secure. (PF 264)
- 463. In support of that testimony, during their October 1997 investigations of the Fort

  Lee translator, Mr. Hurst and Mr. Hidle examined the location in the basement of the

  Mediterranean Towers where Mr. Turro claimed to have had a Pomona translator receive antenna
  installed. Mr. Hurst testified that a strong, "perhaps phenomenal," signal from the Pomona
  translator was received in that general area. The presence of that strong signal was demonstrated
  conclusively in the video tape associated with Mr. Hurst's testimony. (PF 268)
- 464. Mr. Hurst also testified that in that basement location he observed an abandoned antenna covered in dust, which was shown in the video tape. (PF 267) This uncontested testimony supports the credibility of Mr. Turro's testimony that he had used an antenna in the basement to receive the Pomona translator.
- 465. Mr. Turro testified that, in his opinion, the signal generator used by Mr. Loginow could not have passed through more than 23 stories of the structure of the Mediterranean Towers and overwhelm the receive antenna in the basement, explaining why Mr. Loginow observed no reaction when he generated a 94.3 MHz signal inside of the roof enclosure. (PF 265)
- 466. Mr. Loginow opposed that explanation by testifying that he was confident that the signal generator would have affected an antenna in the basement of the building. He testified

that a phenomenon known as "ducting," the passage of radio waves through metal shafts such as used for elevators or air conditioning, would have carried the signal he generated from the roof enclosure to a basement antenna. (PF 269) However, Mr. Loginow testified that the staircase where he performed the tests would not have been able to act as a "duct" for the radio waves. (PF 274)

467. Mr. Loginow's testimony that the signal generator would have affected a Pomona translator receive antenna in the basement of the Mediterranean Towers is not credible for two significant reasons, even if the theory of ducting is accepted at face value. First, Mr. Loginow testified that he never inspected the intervening 26 floors of the building, and he never inspected the basement, so he had no knowledge of what obstructions were there to impede transmissions from the signal generator, or if there were any "ducts" available to carry a signal. Nor did Mr. Loginow have any knowledge of the sensitivity of the receive antenna used in the basement. (PF 272-274) It is not credible that Mr. Loginow's "low level" signal (PF 252) of less than one half a watt (PF 254) could pass through the intervening cinder block room and twenty six stories of building to "override another weaker signal" (PF 252) when the signal to be "overridden" was in fact "phenomenal." (PF 268) Mr. Loginow's testimony makes it clear that he went to the roof to perform the signal generator tests on May 15, 1995 because he wanted to be near the receiving antennas to be tested, and preferably out in the open on the roof to avoid obstructing walls (which is exactly what he did during the June 4, 1997 signal generator testing when he obtained access to the roof). Mr. Loginow wanted to be near, and unobstructed from, the receive antennas to be tested so that his "low level" signal, of less than 0.5 watts, would be locally strong enough to "override" the more distant signal of the station which was supposed to be received.

However, due to significant distance from the location of the antenna in the basement actually receiving the Pomona translator at the time, and the substantial obstructions represented by a 26 story building, Mr. Loginow's weak signal generator did not override the "phenomenal" (*i.e.* far stronger) Pomona translator signal being received in the basement.

468. Second, Mr. Hurst testified that during the investigations of the Fort Lee translator in October 1997, he conducted tests to confirm or deny whether the signal generated by Mr. Loginow at roof level could have affected an antenna in the basement. Mr. Hurst stated that a 5 watt signal was generated from the basement location of the former Pomona translator receive antenna and a receiver at roof level was not affected. From that testing, Mr. Hurst concluded that Mr. Loginow's 0.5 watt signal from the roof area would not have affected an antenna at the basement antenna because a signal ten times more powerful from the basement location did not affect an antenna at the roof area. (PF 266) That test refutes Mr. Loginow's testimony and the theory of "ducting."

469. Therefore, the record supports the conclusion that the May 15, 1995 testing conducted by Mr. Loginow did not demonstrate that WMG-499 was being used to supply programming to the Fort Lee translator and, in fact, that on May 15, 1995 the Fort Lee translator was receiving programming off the air from the Pomona translator.

## 6) Other evidence supporting the conclusion that Mr. Turro complied with the Commission's Rules

#### a) Mr. Loginow's observations of audio quality

470. Mr. Loginow testified to his observations of the quality of the Jukebox Radio audio he heard on 103.1 MHz while listening to the Fort Lee translator during his investigations on

April 14, May 15, July 31, and August 2, 1995. He testified that the audio was of high quality on May 15, July 31 and August 2, 1995, but had been of lesser quality on April 14, 1995. (PF 112; 117; 119)

- 471. As noted previously, Mr. Loginow determined through direct inspection and testing of the facilities of the Fort Lee and Pomona translators on August 2, 1995 that the translators were receiving their programming by off the air reception. (PF 118-134) He also testified that the high audio quality he observed on August 2, 1995 was consistent with the high audio quality he observed on May 15 and July 31, 1995. (PF 117)
- 472. The fact that Mr. Loginow found the high audio quality on August 2, 1995 (a day he determined through direct inspection and testing that the Fort Lee and Pomona translators were receiving programming off the air) to be comparable to what he observed on May 15, 1995 tends to further support the conclusion that on May 15, 1995 the Fort Lee translator was receiving programming off the air from the Pomona translator.
- 473. On July 31, 1995, Mr. Loginow listened to the Fort Lee translator, and observing audio quality higher in comparison to what he remembered from April 14, 1995, assumed that the programming was being supplied by an "alternate means" such as a telephone line. (PF 116-117)
- 474. Mr. Loginow's assumption on July 31, 1995 is without weight because it was unsupported by any investigation (PF 117), and two days later he inspected both of the translators to the extent he saw fit and found them to be receiving off the air and found no means of program delivery to them other than off the air reception. (PF 127; 131)

- 475. The record suggests the reason why Mr. Loginow observed a lesser audio quality from the Fort Lee translator on April 14, 1995. Earlier that month, the Monticello station antenna had been damaged by a lightning strike, causing its transmitter to reduce operating power. Mr. Hurst's office had filed an application with the Commission to that effect prior to Mr. Loginow's inspection. (PF 104-105) In addition, Mr. Loginow himself had observed on April 13, 1995, that the Monticello station transmitter was operating at reduced power. (PF 107)
- 476. Mr. Hurst testified that it was possible that a reduced power operation by the Monticello station could cause reduced retransmission signal quality from the Fort Lee translator. (PF 106) Mr. Loginow also agreed that it was possible that a reduction in transmission power by the Monticello station could cause degradation of the Fort Lee translator's signal. (PF 107)
- 477. Therefore, the high quality signal of the Fort Lee translator observed by Mr.

  Loginow on August 2, 1995, a day he personally determined that the translators were receiving their programming by off the air reception, tends to support the conclusion that the Fort Lee and Pomona translators were receiving programming by off the air reception on May 15 and July 31, 1995, other days on which Mr. Loginow observed comparably high quality audio. The reduced audio quality Mr. Loginow observed on April 14, 1995, another day he determined that the translators were receiving their programming by off the air reception, was explained by damage to the Monticello station antenna which has been documented in the record conclusively by Mr Loginow's contemporary April 13, 1995 observation, the testimony of Mr. Turro and Mr. Hurst, and the contemporaneous application to the Commission by MMBI.

#### b) Jukebox Radio program interruptions

478. Mr. Turro testified to the arrangement by which Jukebox Radio programming is broadcast: the programming is produced in the Dumont studio, sent along 56 Kbps landlines leased from the telephone company to the Monticello station, broadcast from there, and then retransmitted by the Fort Lee and the Pomona translators. (PF 57; 59) Mr. Turro also testified that remote control of the Monticello station transmitter from the Dumont studio was available across a data channel which shared the landlines carrying the Jukebox Radio programming. (PF 62) This testimony was undisputed.

479. Mr. Turro testified that the landline connections between the Dumont studio and the Monticello station had never been interrupted, except on two occasions due to accidental cuts, once on July 6, 1995 and a second time a few months later. Mr. Turro testified that on both occasions, the Monticello station had immediately lost the program feed, causing it to go silent and also causing both the Fort Lee translator and the Pomona translator to go silent as well. Mr. Turro testified that Mr. Hurst was with him on July 6, 1995 and observed the loss of program transmissions by the Monticello station and the Fort Lee and Pomona translators caused by the landline cut. (PF 67; 71-72)

480. Mr. Hurst confirmed Mr. Turro's testimony concerning the landline cut on July 6, 1995. On that day, Mr. Hurst testified that he was examining the translators and the Monticello station in preparation for the statement which was dated July 25, 1995, and supplied to the Commission as part of Mr. Turro's July 27, 1995 response to Mr. Goldstein of the Bureau. Mr. Hurst stated that based upon his own knowledge, both the Fort Lee translator and the Pomona translator were off the air with the Monticello station for several hours due to a cut in the

telephone company landline carrying Jukebox Radio programming from the Dumont studio to the Monticello station. This testimony was uncontested. (PF 71; 155)

- 481. Although less specific, Mr. Garland and Mr. Lynch, Jukebox Radio employees at the Dumont studio (PF 44-45), both testified to losing the signal from the Fort Lee translator as a consequence of damage to the landline connections between the Dumont studio and the Monticello station. This testimony was uncontested. (PF 168; 319)
- 482. Mr. Lynch and Mr. Owen (PF 43-44), another Jukebox Radio employee at the Dumont studio, both testified that they were aware of a brief delay between the Jukebox Radio audio live in the studio as compared to what would be heard off the air on 103.1 MHz from the Fort Lee translator. (PF 166-167) Mr. Turro explained that the delay testified to by Mr. Lynch and Mr. Owen was caused by the passage of the programming across the landline connections and then through audio processing facilities at the translators. (PF 165) This testimony was uncontested and confirms the provision of programming from the Dumont studio to the Monticello station and then off the air reception by the two translators.
- 483. Mr. Lynch, who started employment at the Dumont studio on July 4, 1995 (PF 44), also testified to remembering two separate incidents involving technical difficulties with the Pomona translator which interrupted the broadcast of Jukebox Radio programming from the Fort Lee translator. (PF 170-171) This testimony was uncontested.
- 484. Mr. Lynch testified that in his experience, any time that there was a problem with the transmission of Jukebox Radio programming, the programming was lost from the Fort Lee translator on 103.1 MHz. In his experience, there had never been a time when Jukebox Radio

programming was transmitted by the Fort Lee translator while the Monticello station was not transmitting. (PF 168-169)

485. Mr. Garland, a Jukebox Radio employee since September 1994, testified that he was not aware of any circumstance when the Monticello station was off the but the Fort Lee translator on 103.1 MHz was on the air. (PF 320)

486. From the foregoing, Mr. Turro's testimony is accepted and it is concluded that Mr. Turro operated the Fort Lee translator and the Pomona translator in compliance with Section 74.1231(b) of the Commission's Rules by supplying the Jukebox Radio programming to them by reception "directly through space," or by means of off the air reception.

#### c) Use of WMG-499

- 487. The record establishes that WMG-499 was in operation continuously from the time that the Monticello station went on the air in late October 1994, until it was deactivated permanently in early July 1995. During that period of time, it was used only for the transmission of telemetry, *i.e.* "operational communications" under Section 74.531(f) of the Commission's Rules, from the Dumont studio to the Fort Lee translator, and possibly for the origination of five or fewer emergency messages from that translator. Mr. Turro supplied Jukebox Radio programming to WMG-499 to make the station readily identifiable in the event of interference problems. ( C 436-441)
- 488. The conclusions above establish that the Fort Lee and Pomona translators received their programming via off the air reception ( C 403-486), and therefore, the Fort Lee translator did not receive programming directly from WMG-499. Testimony from Mr. Warshaw and Mr. La Follette that they heard Jukebox Radio audio on WMG-499's frequency is consistent with,

and does not contradict, Mr. Turro's testimony about its operation, and their mere observations, without any personal knowledge of the actual operations of the Fort Lee translator, cannot overcome the overwhelming evidence that the Fort Lee translator received its programming off the air. As discussed below, testimony from Mr. Luna and Mr. Gaghan about WMG-499 suffers from lack of personal knowledge of the translator's operations, in addition to the substantial credibility failures set forth below. ( C 501-537)

489. Therefore, it is concluded that WMG-499 was not used for the provision of Jukebox Radio programming directly from the Dumont studio to the Fort Lee translator. The uses of WMG-499 established in the record are consistent with the Commission's Rules.

#### C Transfer of control

490. The record establishes that Mr. Turro never exercised operational or financial control of the Monticello station. While he held the title of "chief operator" for the Monticello station for the first several months of its existence, Mr. Turro was not compensated and he spent little time in the undertaking. Mr. Turro had to look to Mr. Weis, Mr. Blabey or Ms. Montana if he needed anything in connection with the station. While Jukebox Radio made programming available to the Monticello station continuously, or nearly so, under the Network Affiliation Agreement, the record shows that MMBI had the right to reject programming and that it retained all of its duties and obligations as an FCC licensee. (PF 379-385) Therefore, the record is clear that Mr. Turro did not take control of the Monticello station.

#### D Mr. Turro's Candor concerning the translators

491. As the preceding conclusions set forth, the record establishes that Mr. Turro operated the Fort Lee translator and the Pomona translator in compliance with Section